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CARR & FERRELL LLP 2200 GENG ROAD PALO ALTO, CA 94303			EXAMINER JOO, JOSHUA	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,808

Applicant(s)

HOPEN ET AL.

Examiner

JOSHUA JOO

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/14/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Detailed Action

1. This Office action is in response to communication dated 02/14/2008.
Claims 1-23 are presented for examination.

Drawings

2. Replacement drawings dated 02/14/2008 are accepted.

Specification

3. The amendment to the title is accepted.

Claim Objections

4. Claim 10 is objected to because of the following informalities:
 - i) Examiner suggests changing "the cached information" to "the information cached" to clearly refer to the information of claim 9.

Response to Arguments

5. Applicant's arguments filed 02/14/2008 have been fully considered but they are not persuasive.
Applicant argued that:

6. (1) O'Neil does not disclose a service monitoring process that "monitors a working status" of at least one platform service. Working status does not refer to load or load processing. Rather working status may indicate whether the platform is "running", "not running", or "starting" for instance.

7. In response, Examiner respectfully disagrees that O'Neil does not disclose of "monitoring a working status" of at least one platform service. O'Neil teaches of a service determining a working condition of the server such as the load, the operating capacity of the server, and whether the load of the server exceeds a predetermined level (col. 6, lines 17-23). The claimed working status is considered as

the working condition of the server. The service also monitors the working status as the service determines, i.e. checks, the load, operating capacity, and whether the load exceeds the predetermined level.

It is also respectfully noted that the features upon which applicant relies (i.e., working status may indicate whether the platform is "running", "not running", or "starting") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. (2) O'Neil does not disclose load balancing "based on least the working status of the at least one platform service.

9. In response, Examiner respectfully disagrees that O'Neil does not disclose load balancing "based on least the working status of the at least one platform service. O'Neil teaches of determining that the server exceeds an operating capacity and routes a received network request to another server with the smallest load (col. 6, lines 34-36; col. 7, lines 24-31). The server is performing load balancing by routing the network request to another server, and the load balancing is based on the working status as the routing is based on the working condition of the server.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3, 5, 11-12, 14, 17, 20-21, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Neil et al. US Patent #6,128,279 (O'Neil hereinafter).

12. As per claim 1, O'Neil teaches the invention as claimed including a network appliance, comprising:

at least one platform service (col. 5, lines 45. Process request. col. 4, line 65-col. 5, line 6. Server may be a WWW, CORBA, ORB, SMTP server.);

a service monitor that monitors a working status of the at least one platform service using interprocess communications (col. 6, lines 27-32. Determine load, operating capacity, and whether a predetermined level is exceed.); and

a load balancer that performs load balancing on received communications based on at least the working status of the at least one platform service (col. 6, lines 34-36. Determine that the load exceeds a predetermined level. col. 7, lines 24-31. Route the network request to another server.).

13. As per claim 11, O'Neil teaches the invention as claimed including a network comprising:

a first network appliance having at least one first platform service (col. 5, lines 37-40, 44-45. Servers, e.g. server 9, that process requests.), a service monitor that monitors a working status of the at least one first platform service using interprocess communications (col. 6, lines 27-32. Determine load, operating capacity, and whether the a predetermined level is exceed.), and a first load balancer that performs load balancing on communications received by the first network appliance based on at least the working status of the at least one first platform service (col. 6, lines 34-36. Determine that the load exceeds a predetermined level. col. 7, lines 24-31. Route the network request to another server.); and

a second network appliance having at least one second platform service (col. 5, lines 37-40, 44-45. Servers, e.g. server 7, that process requests.) and a second load balancer that performs load balancing on communications received by the second network appliance (col. 5, lines 37-47. Servers include load balancing modules, e.g. module 17. Determine whether to process the request.).

14. As per claim 20, O'Neil teaches the invention as claimed including a method of processing client communications to a network, comprising:

receiving a first client communications at a first network appliance hosting at least one first platform service (col. 5, lines 43-44; col. 6, lines 12-15. Receive request. col. 5, lines 45. Process request. col. 4, line 65-col. 5, line 6. Server may be a WWW, CORBA, ORB, SMTP server.);

employing a load balancer hosted by the first network appliance to direct the first client to the at least one first platform service hosted by the first network appliance based on at least a working status of the at least one first platform service (col. 6, lines 29-36. Determine processing load and that the predetermined level is not exceeded. The network request is processed.);

receiving a second client communication at the first network appliance (col. 6, lines 11-14. Network request. It is inherent that a server may receive more than one request. col. 7, lines 40-47. Requests.); and

employing the load balancer to direct the second client communications to a second platform service hosted by a second network appliance based on at least the working status of the at least one first platform service and a working status of the second platform service (col. 6, lines 50-57. Determine the load of another server. col. 7, lines 4-20. Determine whether the another server is off-line or unable to exchange information. col. 7, lines 24-31. Route request to the another server.).

15. As per claim 2, O'Neil teaches the network appliance of claim 1, further comprising a backplane interface through which the network appliance exchanges data with another device (col. 6, lines 36-43. Modules in servers exchange information. fig. 3; col. 7, lines 47-50. Route request to another server.).

16. As per claim 3, O'Neil teaches the network appliance of claim 2, wherein

the another device hosts at least one second platform service (col. 5, lines 37-40, 44-45. Servers, e.g. server 7, that process requests. col. 4, line 65-col. 5, line 6. Server may be a WWW, CORBA, ORB, SMTP server.), and

the service monitor monitors a working status of the second platform service using communications transmitted over the backplane (col. 6, lines 36-44. Determine load of other servers. col. 7, lines 4-20. Determine whether the another server is off-line or unable to exchange information.).

17. As per claims 5 and 14, O'Neil teaches the invention of claims 1 and 11, wherein the at least one platform service is an access method service (col. 4, line 65-col. 5, lines 6. Servers may be a WEB, FTP, or SMTP server, which would provide WEB, FTP, or SMTP services.).

18. As per claim 12, O'Neil teaches the network of claim 11, wherein the second network appliance further includes a second service monitor that monitors a working status of the at least one second platform using interprocess communications (col. 5, lines 37-47. Servers comprise load balancing modules. Module includes process steps to determine whether to process a request. col. 6, lines 18-29. Determine the load, operating capacity, and whether load exceeds a predetermined level.).

19. As per claim 17, O'Neil teaches the network of claim 11, wherein the at least second platform service is an access method service (col. 4, line 65-col. 5, lines 6. Servers may be a server that provides WEB, FTP, SMTP services.).

20. As per claim 21, O'Neil teaches the method of claim 20, further comprising: analyzing the first client communications to determine if the first client communications includes association data indicating that the first client communication is associated with the at least one first platform service; and

determining that the first client communication includes association data indicating that the first communications is associated with the at least one first platform service. (col. 4, line 66-col. 5, line 6. Servers may be WWW, CORBA, FTP, SMTP servers. col. 6, lines 12-15, 29-32. Request is processed, and server outputs a response. For the request to be properly processed or service the request, it is inherent that the request comprises information indicating what service is being requested or associated with the request, e.g. http get request, email transmission.)

21. As per claim 23, O'Neil teaches the method of claim 20, further comprising:
executing a load balancing algorithm to determine whether the second client communication should be directed to the second platform service (col. 6, lines 11-14. Network request. It is inherent that a server may receive more than one request. col. 7, lines 40-47. Requests. col. 6, lines 21-24, 36-41. Determine load and the loads of other servers.); and
determining that the second client communications should be directed to the second platform service based upon results of the executed load balancing algorithm (col. 7, lines 1-3, 21-25. Determine load and online status to route requests. col. 7, lines 24-28, 45-50. Route request to another server.).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
23. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Rao, US Patent #6,789,118 (Rao hereinafter).

24. As per claim 4, O'Neil teaches monitoring a working status of the network appliance. O'Neil does not specifically teach the network appliance of claim 1, further comprising an interface monitor that monitors a working status of interfaces and connections employed by the network appliance.

25. Rao teaches of a network appliance (switch) monitoring the working status of interfaces and connections employed by the network appliance (col. 8, lines 10-20, 24-29. Monitor the state of links and ports).

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to monitor the working status of interfaces and connections employed by the network appliance. The motivation for the suggested combination is that Rao's teachings would improve O'Neil's teachings by allowing additional monitoring to determine whether a server can sufficiently service network requests. Rao's teachings would also allow recovery from detected equipment faults and links failures (col. 8, lines 17-23).

27. Claims 6-7, 15-16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Shanumgam et al. US Patent #7,032,022 (Shanumgam hereinafter).

28. As per claims 6 and 15, O'Neil does not specifically teach the invention of claims 5 and 14, wherein the access method service is a private network service.

29. Shanumgam teaches of a network device providing VPN service (fig. 1, 17; col. 4, lines 34-39; col. 5, lines 37-43; col. 14, lines 35-39).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the server to provide VPN service. The motivation for the suggested combination is that O'Neil suggests desirability of allowing different services by teaching that the

invention can be used with different types of servers. Furthermore, Shanumgam's teachings would improve O'Neil's teachings by providing clients with secure communications on a public network.

31. As per claims 7 and 16, O'Neil does not specifically teach the invention of claims 5 and 14, wherein the access method is an extranet Web service.

32. Shanumgam teaches of a network device providing extranet Web services (fig. 1; col. 4, lines 34-39; col. 5, lines 37-43; col. 6, lines 9-13. VPN service to connect to a public network).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of O'Neil and Shanumgam for the server to provide extranet Web services. The motivation for the suggested combination is that O'Neil teaches that the invention can be used with different types of servers, and Shanumgam's teachings would provide secure communications on a public network.

34. As per claim 18, O'Neil does not specifically teach the network in claim 17, wherein the access method service is a private network service.

35. Shanumgam teaches of a network device providing VPN service (fig. 1, 17; col. 4, lines 34-39; col. 5, lines 37-43; col. 14, lines 35-39).

36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of O'Neil and Shanumgam for the server to provide VPN service. The motivation for the suggested combination is that O'Neil suggests desirability of allowing different services by teaching that the invention can be used with different types of servers. Furthermore, Shanumgam's teachings would improve O'Neil's teachings by providing clients with secure communications on a public network.

37. As per claim 19, O'Neil does not specifically teach the network in claim 17, wherein the access method is an extranet Web service.

38. Shanumgam teaches of a network device providing extranet Web services (fig. 1; col. 4, lines 34-39; col. 5, lines 37-43; col. 6, lines 9-13. VPN service to connect to a public network).

39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of O'Neil and Shanumgam for the server to provide extranet Web services. The motivation for the suggested combination is that O'Neil suggests desirability of allowing different services by teaching that the invention can be used with different types of servers. Furthermore, Shanumgam's teachings would provide secure communications on a public network.

40. Claims 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Le et al. US Patent #6,145,089 (Le Hereinafter).

41. As per claim 8, O'Neil teaches determining the working status of the at least one platform service. O'Neil does not specifically teach the network appliance recited in claim 1, further comprising a node manager that determines the working status and provides a determined working status of the at least one platform service to the service monitor.

42. Le teaches of a server comprising a server manager that monitors the working status of a service and indicates the working status to another manager (col. 7, lines 32-46; col. 8, lines 43-46. Monitor functioning of the service or service group. Observe service failure.).

43. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the service monitor as taught by O'Neil to receive a working status of a service determined and provided by a manager as taught by Le. The motivation for the suggested

combination is that Le's teachings would improve reliability of O'Neil's teachings by distributing the task of determining a working status to a manager and allowing servers to fail over services to other servers.

44. Claims 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Jordan et al. US Patent #6,438,652 (Jordan hereinafter).

45. As per claim 9, O'Neil does not specifically teach the network appliance of claim 1, further comprising a distributed cache service that caches information relating to at least one platform on another network appliance.

46. Jordan teaches of a server comprising a distributed cache service, wherein the server caches information relating to another server (col. 4, lines 14-19; col. 7, lines 43-51. Send a copy of cached object p to a cache server.)

47. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the server to comprise a distributed cache service, wherein the server caches information relating to another server. The motivation for the suggested combination is that Jordan's teachings would improve O'Neil's teachings by providing distributed load balancing of cached information, and retrieving content from the cache would reduce the time required to service requests.

48. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil and Jordan, in view of Kakemizu et al., US Patent #7,068,640 (Kakemizu hereinafter).

49. As per claim 10, O'Neil teaches that the at least one platform service is an access method service (col. 4, line 65-col. 5, lines 6. Servers may be a WEB, FTP, or SMTP server, which would provide WEB, FTP, or SMTP services.). O'Neil does not specifically teach the invention of claim 9, wherein the cached

information includes authentication information and encryption key information for encryption sessions hosted by the access method service.

50. Kakemizu teaches of an ISP (server) providing VPN services, wherein the server comprises cached information that includes authentication information and encryption key information for encryption sessions hosted by the service (fig 7. col. 7, line 58-col. 8, line 17. VPN information cache. VPN information profile comprises identifiers, authentication, encryption keys.).

51. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the cached information as taught by O'Neil and Jordan to include authentication information and encryption key information for encryption sessions hosted by the service as taught by Kakemizu. The motivation for the suggested combination is that O'Neil suggests desirability of allowing different services by teaching that the invention can be used with different types of servers. Furthermore, Kakemizu's teachings would improve the suggested system by providing secure network communications and reduce the time required to process requests.

52. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Brendel et al. US Patent #5,774,660 (Brendel hereinafter).

53. As per claim 13, O'Neil suggests of a first server (first network appliance) receiving all communications (fig. 3. server 7). O'Neil does not specifically teach the network of claim 11, wherein the first network appliance is configured to receive all client communications to the network unless the first load balancer process fails; and the second network appliance is configured to receive all client communications to the network if the first load balancer process fails.

54. Brendel teaches of a primary load balancer receiving all packets to the network, and a second network load balancer is configured to receive all packets to the network if the first load balancer process fails (claim 14; col. 19, lines 9-14. Backup load balancer takes over if primary load balancer fails.).

55. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the first server comprising a load balancer as taught by O'Neil to receive all packets to the network and for a second device, such as a second server comprising a load balancer in O'Neil, to receive all packets to the network if the first load balancer fails. The motivation for the suggested combination is that Brendel's teachings would allow continued load balancing of communications in the network should the first server fail.

56. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil, in view of Kakemizu et al., US Patent #7,068,640 (Kakemizu hereinafter).

57. As per claim 22, O'Neil does not specifically teach the method of claim 21, wherein the association data is a session identifier identifying an encryption session maintained by the at least one first platform service.

58. Kakemizu teaches of providing a session id identify an encryption session maintained by a service provider (col. 7, line 58-col. 8, line 17).

59. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to implement a server providing a VPN service and provide a session id to identify an encryption session maintained by the server The motivation for the suggested combination is that O'Neil teaches that the invention can be used with different types of servers, and Kakemizu's teachings would improve O'Neil's teachings by providing secure network communications and allow the server to retrieve a client VPN profile to set a VPN path.

Conclusion

60. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

61. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

62. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

63. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

64. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. J./

Examiner, Art Unit 2154

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154